Appl. No. 10/014,562

REMARKS

The above-amendments to the claims have been made to place the claims in better form and facilitate examination of the application. Entry and consideration thereof are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
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MARKED-UP VERSION SHOWING CHANGES

IN THE CLAIMS

Claims 2 and 16 have been cancelled without prejudice or disclaimer of the subject matter contained therein.

Claims 1, 3, 5-9, 15, 17 and 19 have been amended as follows.

1. (Amended) A method of performing a one-pot organic reaction, which includes carbon monoxide as reactant and does not without the use of an external CO gas source, which comprises comprising

preparing a reaction mixture containing a non-catalysing solid or liquid CO releasing compound, which is a metal carbonyl of the general formula I,

$M_{x}(CO)_{y}$

wherein M is a metal, x is an integer, y is an integer, a non-metal substrate compound and a metal catalyst; wherein the metal carbonyl is not complexed with or bonded to the non-metal substrate prior to preparing said reaction mixture; and

exposing said reaction mixture to an energy source to release carbon monoxide from the CO releasing compound,

wherein carbon atoms of the released carbon monoxide form a bond with the non-metal substrate compound.

3. (Amended) A method of performing a one-pot organic reaction, which includes carbon monoxide as reactant without the use of an external CO gas source, comprising preparing a reaction mixture containing a The method according to claim 1, wherein the non-catalysing CO releasing compound which is a formamide of the general formula II,

HCONR₁R₂

wherein R₁ and R₂ independently can be H, or an optionally substituted, linear or branched alkyl, aryl or alkylaryl group, a non-metal substrate compound and a metal catalyst; and exposing said reaction mixture to an energy source to release carbon monoxide from the CO releasing compound, wherein carbon atoms of the released carbon monoxide form a bond with the non-metal substrate compound.

5. (Amended) The method according to any of the preceding claims wherein the reaction mixture further comprises an additional in addition to the non-metal substrate compound also contains an organic reactant.

- 6. (Amended) The method according to claim 5, wherein the additional organic reactant is selected from the group consisting of amines, alcohols, thiols, hydride ions hydrides, alkenes, alkynes, boric acids, boronic acids, carboxylate ions, malonate-type ions, enolate-type ions, azide ions, cyanide ions, halide ions, phosphines R₃P wherein R₃ is aryl, heteroaryl and or alkyl, metal-organic compounds.
- 7. (Amended) The method according to claim $\frac{2}{2}$, wherein M is selected from Mo, W, Mn, Cr, and Co.
- 8. (Amended) The method according to claim $\frac{1}{2}$, wherein the metal carbonyl is selected from the group consisting of Mo(CO)₆, W(CO)₆, Mn₂(CO)₁₀, Cr(CO)₆, and Co₂(CO)₈ or derivatives thereof.
- 9. (Amended) The method according to any claim $\frac{2}{2}$ 1, wherein the metal carbonyl is used in amounts of 0.1 to 10,000,000 molar equivalents.
- 15. (Amended) A method of preparing a chemical library which comprises chemical libraries comprising preparing a reaction mixture containing a non-catalysing solid or liquid CO releasing compound, which is a metal carbonyl of the general formula I,

M_x (CO) y

wherein M is a metal, x is an integer, y is an integer, a non-metal substrate compound and a metal catalyst, wherein the metal carbonyl is not complexed with or bonded to the non-metal substrate prior to preparing said reaction mixture, + and exposing the reaction mixture to an energy source to release carbon monoxide from the CO releasing compound,

wherein the carbon atoms of the released carbon monoxide form a bond with a non-metal substrate compound.

17. (Amended) The method according to claim 15, wherein the non-catalysing A method of preparing chemical libraries comprising preparing a reaction mixture containing a non-catalysing liquid CO releasing compound, which is a formamide of the general formula # II,

HCONR₁R₂

wherein R_1 and R_2 independently can be H, or an optionally substituted, linear or branched alkyl, aryl or alkylaryl group, a non-metal substrate compound and a metal catalyst; and

exposing the reaction mixture to an energy source to release carbon monoxide from the CO releasing compound, wherein the carbon atoms of the released carbon monoxide form a bond with the non-metal substrate compound.

19. (Amended) A kit for organic reactions including CO as reactant comprising a <u>selection of</u> one or more solid or liquid CO releasing compounds, selected from metal carbonyls of the general formula I,

 $M_x(CO)_y$

wherein M is a metal, x is an integer, y is an integer, or formamides of the general formula II,

HCONR₁R₂

wherein R_1 and R_2 independently can be H, or an optionally substituted, linear or branched alkyl, aryl or alkylaryl group.